



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,079	10/31/2003	Ziyun Wang	ATMI-594-CIP	1841
25559	7590	10/04/2006	EXAMINER	
ATMI, INC. 7 COMMERCE DRIVE DANBURY, CT 06810			BARTS, SAMUEL A	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,079

Applicant(s)

WANG ET AL.

Examiner

Samuel A. Barts

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/31/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 14-20 and 24-31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-13 and 18-23 and the elected species of $(\text{HNBu}^t)_2(\text{NH}_2)\text{Si-Si}(\text{NH}_2)(\text{HNBu}^t)$ in the reply filed on 8/31/06 is acknowledged. The traversal is on the ground(s) that searching multiples species would not be a serious burden to the examiner. This is not found persuasive because prior art anticipating and/or rendering obvious one species would not necessarily be pertinent to other species. The additional search required to examine multiple species would be a serious burden to the examiner.

Applicant has further requested rejoinder of non-elected subject if and when claims drawn to compounds and composition are found allowable. The examiner will rejoin the process claims, as long as the scope of process claims is the same as the allowed compound claims.

The requirement is still deemed proper and is therefore made FINAL.

Status of Claims

2. Claims 14-17 and 24-31 are withdrawn from consideration

Claims 18-20 are withdrawn from consideration as not being directed to the elected species.

Allowable Subject Matter

3. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1621

4. The following is a statement of reasons for the indication of allowable subject matter:

The elected species and the other species of claim 13 were searched and found to be novel and unobvious over the prior art of record.

Claim Rejections - 35 USC § 102

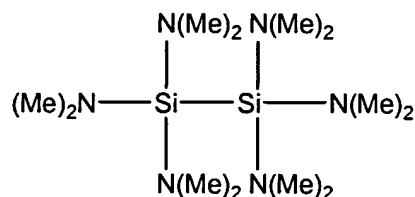
5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yang et al¹.

Yang et al disclose the following compound²:



This compound meets all the limitations of the claims. Some limitations are drawn to inherent properties. For example claims 5, 6 11, and 12 are drawn to properties of the compounds. These limitations are inherent properties of the compound taught in Yang et al.

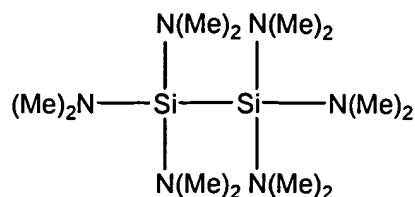
¹ Organometallics 2000, 19 893-900, "Dislane-Catalyzed and Thermally Induces Oligomerization of Alkynes: A Comparison".

² See column 2 on page 898 lines 34-38.

Art Unit: 1621

7. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kito³.

Kito discloses the following compound⁴:



This compound meets all the limitations of the claims for the same reasons given above

Claim Rejections - 35 USC § 103/102

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 21-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kito (Chem. Abstract 1996:212092 and JP 08022986).

Kito teaches a compound which anticipates part “a” of the composition claim. The second part of the composition claim is part “b” which is drawn to the use of hydrocarbon solvents. The abstract is silent as to the use of these solvents. The patent may or may not disclose hydrocarbon solvents. If the patent discloses the use of hydrocarbon solvents the claims are

³ Chem. Abstract 1996:212092 and JP 08022986.

⁴ See abstract: A translation of the Japanese patent has been requested by the examiner.

Art Unit: 1621

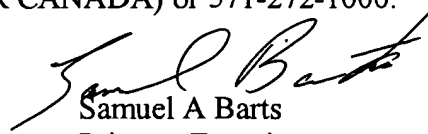
anticipated. If the patent doesn't disclose hydrocarbon solvents the claim are obvious because the utility of the compound in Kito is the same as the instant invention. Thus it is reasonable to assume that a skilled artisan would use the same class of solvents to make silicon films.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Barts whose telephone number is 571-272-2870. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Samuel A Barts
Primary Examiner
Art Unit 1621

SB